## In the Claims

Please substitute the following claims 15, 16 and 28 for the claims 15, 16 and 28 now pending in the above-identified application.

1. (Previously Presented) A compound of the formula:

$$\begin{array}{c}
0 \\
R^{4} \\
N \\
R
\end{array}$$

$$\begin{array}{c}
Q \\
J \\
G \\
R^{3}
\end{array}$$

$$\begin{array}{c}
R^{1} \\
E \\
N \\
R^{2}
\end{array}$$
(I)

wherein R<sup>1</sup> and R<sup>2</sup> may in combination form,

together with an adjacent nitrogen atom, a 1-piperidinyl ring optionally having a substituent or substituents;

- R<sup>3</sup> is a hydrocarbon group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;
- R<sup>4</sup> is a hydrogen atom, a hydrocarbon group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;
- E is a trimethylene group;
- G is CO or  $SO_2$ ;
- J is a nitrogen atom or a methine group optionally having a substituent or substituents; and
- Q and R are each a bond or a divalent chain  $C_{1-3}$  hydrocarbon group optionally having a substituent or substituents,

or a salt thereof.

- 2. (Previously Presented) The compound of claim 1, wherein  $R^3$  is a  $C_{1-6}$  alkyl group optionally having a substituent or substituents, a  $C_{3-8}$  cycloalkyl group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;  $R^4$  is a hydrogen atom, alkyl group optionally having a substituent or substituents, a  $C_{3-8}$  cycloalkyl group optionally having a substituent or substituent or substituent or substituents or a heterocyclic group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;  $R^4$  is a hydrogen atom or a heterocyclic group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;  $R^4$  is a hydrogen atom or a methine group optionally having a substituent or substituents; and  $R^4$  are each a bond or a  $R^4$  alkylene group optionally having a substituent or substituents.
  - 3. (Cancelled)
  - 4. (Cancelled)
- 5. (Previously Presented) The compound of claim 1, wherein the substituent of the 1-piperidinyl group is (1) phenyl- $C_{1.4}$  alkyl optionally having halogen on a benzene ring, (2) diphenylmethyl optionally having hydroxy, (3) benzoyl optionally having halogen on a benzene ring, (4) 2-phenylethen-1-yl, (5) phenyl optionally having halogen, (6) hydroxy, (7) phenoxy or (8) benzyloxy.
  - 6. (Cancelled)
- 7. (Previously Presented) The compound of claim 1, wherein the substituent of the 1-piperidinyl group is a benzyl group optionally having halogen on a benzene ring.

- 8. (Original) The compound of claim 1, wherein  $R^3$  is (1) a  $C_{1-6}$  alkyl group, (2) a  $C_{3-8}$  cycloalkyl group, (3) a benzyl group optionally having a hydroxy group, (4) a naphthylmethyl group, (5) a phenyl group optionally having, as a substituent, (a)  $C_{1-4}$  alkyl optionally having halogen, (b)  $C_{1-4}$  alkoxy optionally having halogen, (c) phenyl, (d) cyano, (e) benzyloxy or (f) a halogen atom, (6) a naphthyl group, (7) an indanyl group or (8) a tetrahydronaphthyl group.
- 9. (Original) The compound of claim 1, wherein  $R^3$  is a phenyl group optionally having, as a substituent,  $C_{1-4}$  alkyl or halogen.

## 10. (Cancelled)

- 11. (Original) The compound of claim 1, wherein  $R^4$  is (1) a hydrogen atom, (2)  $C_{1-6}$  alkyl optionally having (a) halogen, (b) pyridyl, (c) morpholino, (d) furyl, (e) ethynyl or (f)  $C_{3-8}$  cycloalkyl, (3) phenyl- $C_{1-4}$  alkyl optionally having (a) halogen, (b)  $C_{1-4}$  alkyl, (c) halogeno- $C_{1-4}$  alkyl or (d)  $C_{1-4}$  alkoxy on a benzene ring, or (4)  $C_{3-8}$  cycloalkyl.
- 12. (Original) The compound of claim 1, wherein  $R^4$  is (a)  $C_{1.4}$  alkyl group optionally having, as a substituent, halogen or furyl or (b) a benzyl group optionally having halogen on a benzene ring.
- 13. (Original) The compound of claim 1, wherein -N(R<sup>1</sup>)R<sup>2</sup> is a 1-piperidinyl group optionally having a substituent or substituents, E is a trimethylene group, R<sup>3</sup> is a phenyl group optionally having a substituent or substituents, G is CO, J is CH, and Q and R are each a methylene group.

- 14. (Original) A compound selected from the group consisting of N-[3-(4-benzyl-1-piperidinyl)propyl]-N-(3,4-dichlorophenyl)-1-methyl-5-oxo-3-pyrrolidinecarboxamide, 1-benzyl-N-[3-(4-benzyl-1-piperidinyl)propyl]-5-oxo-N-phenyl-3-pyrrolidinecarboxamide, 1-(2-chlorobenzyl)-N-[3-(4-benzyl-1-piperidinyl)propyl]-5-oxo-N-phenyl-3-pyrrolidinecarboxamide, N- $\sqrt{3}$ -[4-(4-fluorobenzyl)-1-piperidinyl]propyl $\sqrt{N}$ -N-(3,4-dichlorophenyl)-1-methyl-5-oxo-3-pyrrolidinecarboxamide and N-[3-(4-benzyl-1-piperidinyl)propyl]-5-oxo-N-phenyl-1-(2,2,2-trifluoroethyl)-3-pyrrolidinecarboxamide, or a salt thereof.
  - 15. (Currently Amended) A prodrug of the compound of claim 1, wherein an amino group of said compound is acylated, alkylated or phosphorated; a hydroxy group of said compound is acylated, alkylated, phosphorated or borated; or a carboxyl group of said compound is esterified or amidated.
- 16. (Currently Amended) A pharmaceutical composition comprising <u>a therapeutically</u> <u>effective amount of</u> the compound of claim 1 or a prodrug thereof and a pharmaceutically acceptable carrier, excipient or diluent.

Claims 17-21 (Cancelled)

22. (Withdrawn) The composition of claim 16, further comprising a protease inhibitor, a reverse transcriptase inhibitor or a combination thereof.

- 23. (Withdrawn) The composition of claim 22, wherein the reverse transcriptase inhibitor is zidovudine, didanosine, zalcitabine, lamivudine, stavudine, abacavir, nevirapine, delavirdine or efavirenz.
- 24. (Withdrawn) The composition of claim 22, wherein the protease inhibitor is saquinavir, ritonavir, indinavir, amprenavir or nelfinavir.
- 25. (Previously Presented) A method for the prophylaxis or treatment of HIV infectious diseases comprising administering to a subject in need thereof, a compound of claim 1 or a prodrug thereof, and a protease inhibitor and/or a reverse transcriptase inhibitor such that HIV infectious disease is prevented or treated.
  - 26. (Previously Presented) A method for producing a compound of the formula:

wherein R1 and R2 may in combination form,

together with an adjacent nitrogen atom, a 1-piperidinyl ring optionally having a substituent or substituents;

- R<sup>3</sup> is a hydrocarbon group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;
- R<sup>4</sup> is a hydrogen atom, a hydrocarbon group optionally having a substituent or substituents or a heterocyclic

group optionally having a substituent or substituents;

- E is a trimethylene group;
- G is CO or  $SO_2$ ;
- J is a nitrogen atom or a methine group optionally having a substituent or substituents; and

Q and R are each a bond or a divalent chain C<sub>1-3</sub> hydrocarbon

group optionally having a substituent or substituents,

or a salt thereof, which method comprises reacting a compound of the formula:

$$H = N = E = N$$

$$R^{3}$$

$$R^{2}$$
(II)

wherein each symbol is as defined above, or a salt thereof, and a compound of the formula:

wherein R<sup>5</sup> is a carboxyl group or a sulfonic acid group, a salt thereof or a reactive derivative thereof, and other symbols are as defined above, or a salt thereof.

27. (Previously Presented) A method for producing a compound of the formula:

$$\begin{array}{c}
0 \\
R^{4} \\
N \\
R
\end{array}$$

$$\begin{array}{c}
Q \\
N \\
R
\end{array}$$

$$\begin{array}{c}
R^{1} \\
E \\
N \\
R^{2}
\end{array}$$
(I)

wherein R<sup>1</sup> and R<sup>2</sup> may in combination form,

together with an adjacent nitrogen atom, a 1-piperidinyl ring

optionally having a substituent or substituents;

- R<sup>3</sup> is a hydrocarbon group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;
- R<sup>4</sup> is a hydrogen atom, a hydrocarbon group optionally having a substituent or substituents or a heterocyclic group optionally having a substituent or substituents;
- E is a trimethylene group;
- G is CO or  $SO_2$ ;
- J is a nitrogen atom or a methine group optionally having a substituent or substituents; and
- Q and R are each a bond or a divalent chain  $C_{1-3}$  hydrocarbon group optionally having a substituent or substituents,

or a salt thereof, which method comprises reacting, in the presence of a base, a compound of the formula:

$$\begin{array}{c}
0 \\
R^{4} \\
N \\
R
\end{array}$$

$$\begin{array}{c}
J \\
G \\
R^{3}
\end{array}$$
(IV)

wherein X is a leaving group, and other symbols are as defined above, or a salt thereof and a compound of the formula:

$$H = N \begin{pmatrix} R^1 \\ R^2 \end{pmatrix}$$
 (V)

wherein each symbol is as defined above, or a salt thereof.

- 28. (Currently Amended) A method for suppressing CCR5 receptor activity to inhibit

  HIV infection of human peripheral blood mononuclear cells, which method comprises

  administering an effective amount of the compound of claim 1 to a mammal in need thereof.
- 29. (Previously Presented) A method for the production of a pharmaceutical agent that suppresses a chemokine receptor activity comprising combining a compound of claim 1 with a pharmaceutically acceptable carrier, diluent or excipient.
  - 30. (Cancelled)
  - 31. (Cancelled)
- 32. (Previously Presented) The method of claim 28, wherein the substituent of the 1-piperidinyl group is (1) phenyl- $C_{1-4}$  alkyl optionally having halogen on a benzene ring, (2) diphenylmethyl optionally having hydroxy, (3) benzoyl optionally having halogen on a benzene ring, (4) 2-phenylethen-1-yl, (5) phenyl optionally having halogen, (6) hydroxy, (7) phenoxy or (8) benzyloxy.
  - 33. (Cancelled)
- 34. (Previously Presented) The method of claim 28, wherein the substituent of the 1-piperidinyl group is a benzyl group optionally having halogen on a benzene ring.

- 35. (Previously Presented) The method of claim 28, wherein  $R^3$  is (1) a  $C_{1-6}$  alkyl group, (2) a  $C_{3-8}$  cycloalkyl group, (3) a benzyl group optionally having a hydroxy group, (4) a naphthylmethyl group, (5) a phenyl group optionally having, as a substituent, (a)  $C_{1-4}$  alkyl optionally having halogen, (b)  $C_{1-4}$  alkoxy optionally having halogen, (c) phenyl, (d) cyano, (e) benzyloxy or (f) a halogen atom, (6) a naphthyl group, (7) an indanyl group or (8) a tetrahydronaphthyl group.
- 36. (Previously Presented) The method of claim 28, wherein  $\mathbb{R}^3$  is a phenyl group optionally having, as a substituent,  $\mathbb{C}_{1\!-\!4}$  alkyl or halogen.

## 37. (Cancelled)

- 38. (Previously Presented) The method of claim 28, wherein R<sup>4</sup> is (1) a hydrogen atom, (2) C<sub>1-6</sub> alkyl optionally having (a) halogen, (b) pyridyl, (c) morpholino, (d) furyl, (e) ethynyl or (f) C<sub>3-8</sub> cycloalkyl, (3) phenyl-C<sub>1-4</sub> alkyl optionally having (a) halogen, (b) C<sub>1-4</sub> alkyl, (c) halogeno-C<sub>1-4</sub> alkyl or (d) C<sub>1-4</sub> alkoxy on a benzene ring, or (4) C<sub>3-8</sub> cycloalkyl.
  - 39. (Previously Presented) The method of claim 28, wherein R<sup>4</sup> is (a) C<sub>1-4</sub> alkyl group optionally having, as a substituent, halogen or furyl or (b) a benzyl group optionally having halogen on a benzene ring.
  - 40. (Previously Presented) A method for the prophylaxis or treatment of AIDS comprising administering an effective amount of a compound of claim 1 to a mammal in need thereof.

41. (Previously Presented) A method for suppressing the progress of the disease state of AIDS comprising administering an effective amount of a compound of claim 1 to a mammal in need thereof.